## PELECYPHORUS SEMILAEVIS (HORN) (COLEOPTERA: TENEBRIONIDAE)<sup>1</sup>

## Vasco M. Tanner<sup>2</sup> and Willis A. Packham<sup>3</sup>

In 1870 Dr. George H. Horn described, from a unique, a species of Tenebrionidae which was collected by William M. Gabb in western Nevada. He named it semilaevis assigning it to the genus Asida, In the Henshaw "List of Coleoptera of America, North of Mexico." 1885. there are thirty-eight species referred to this genus. Horn recognized that the species of this genus represented a heterogeneous complex but failed to correct the situation. In 1912 Colonel Casey revised the tribe Asidini dispersing species found in Asida between ten genera, eight of which he proposed as new. The genus Asida of Latreille he considered as foreign to America. It appears from a study of many of Casey's genera of the Asidini that some of them should be synonymized.

As he proceeded with his study, some of the previously described species did not fall into his revisional pattern. One of these was Asida semilaevis Horn. He did not have a specimen of the species so had to depend upon Horn's description of the unique which is in the Academy of Natural Sciences of Philadelphia.

Casey was in doubt as to the generic placement of semilaevis, so he tentatively placed it in Trichiasida Csy. He observed that "the arrangement of the elytral costae is exactly that characterizing this genus, but the sinuation of the sides of the prothorax toward base is a character quite at variance with anything hitherto observed, and the author makes no reference to pubescence of any kind, this being present, at least in some form, in all other species." (1912-p. 182).

Fortunately, many specimens of *semilaevis* were recently collected at the Mercury Test Site in western Nevada. They were collected in sunken open cans which served as night traps.

The drawing, figure 1, of a representative specimen from Mercury fits so well Horn's description and remarks that we are convinced that the series before us are representative of the species semilaevis. To further substantiate our belief, Mr. Leech, Curator of Entomology at the California Academy of Science, kindly furnished us with a specimen from the Blaisdell collection which consisted of the "elytra, most abdominal sternites and the mesa and meta sterna" labeled "Brown's Nev. fragment, 4-11-1907. F. H. S." determined as semilaevis by F. E. Blaisdell and placed in the genus Pelecyphorus. We also wish to thank Dr. James A. G. Rehn of the Academy of Natural Sciences of Philadelphia for time spent in ex-

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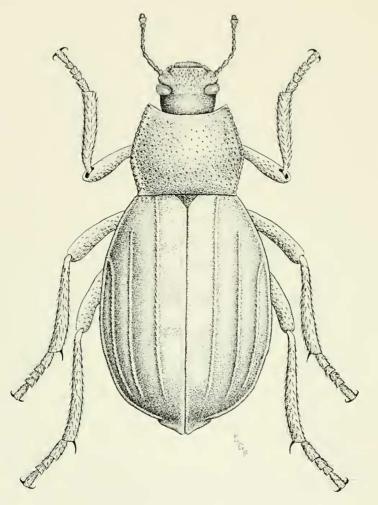


Fig. 1. Pelecyphorus semilaevis (Horn).

amining and reporting on questions concerning the type specimen of *semilaevis* in the Academy collection.

We are not in agreement with Casey's placing *semilaevis* in his new genus *Trichiasida*. We believe it is a *Pelecyphorus* since it does not agree with *T. acerba* Horn and other species placed in the genus, in possessing a pubescent integument, a small transverse mentum, pale slender antennae with the tenth joint abruptly wider, and devoid of cariniform costae.

The following are some of the salient characteristics of Solier's genus *Pelecyphorus*: terminal joint of the maxillary palpi large and scalene; wide buccal space between the mentum and the man-

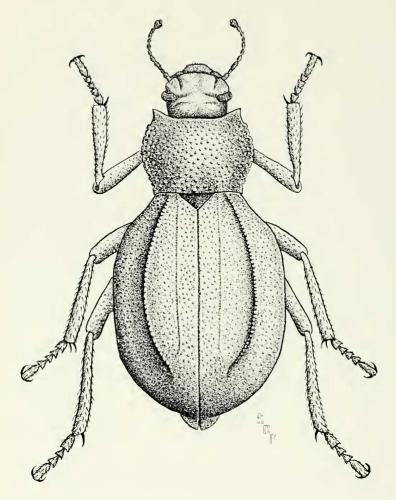


Fig. 2. Pelecyphorus pantex Casey.

dibles; antennae with sparse short black setae, the ninth and tenth joints wider, the tenth emarginate for the reception of the small eleventh joint; anterior body parts smaller when compared with the posterior body; the prosternum between the coxae is longitudinally impressed along the median line.

Col. Casey separated the species of *Pelecyphorus* into three groups. The species upon which this study is based belong to his group III: "Body very variable in form and sculpture but with the pronotum never carinate and the elytra never transversely rugose, rather convex as in group II."

In his key to the species of *Pelecyphorus, semilaevis* runs to *P. opimus*, but is different in many respects. We have not seen a

specimen of *opimus* so must rely upon Col. Casey's description. Our specimens do not agree with *opimus*.

Horn's description describes the specimens so well. We have chosen to reproduce it:

"Semilaevis, black opaque, elongate oval. Head coarsely and sparsely punctured. Thorax sub-quadrate, moderately convex, coarsely, sparsely and unevenly punctured, sides moderately rounded, posteriorly feebly sinuate, anteriorly emarginate, angles not prominent, base truncate, angles rectangular, elytra elongate oval, convex, with a distinct marginal costa, base truncate, angles distinct, disc with six parallel moderately elevated costae, surface between suture and first costa shining, between first costa and margin opaque. Beneath opaque, coarsely and sparsely punctured. Length .90 inch."

At the conclusion of the above description. Horn made the following significant remarks: "The arrangement of the costae of this species is very peculiar. They are moderately elevated, perfectly parallel to the suture and extend three-fourths of the length of the elytra. The first costa arises from the base slightly within the angles of the thorax; the second on a line of the humeri of the elytra, but at some little distance from it; the third arises from the marginal costa at about one-fifth from the humeral angle. This species commences the divergence from the robust form resembling somewhat that of *confluens* (infra)."

Along with a representative series of *semilaevis*, we have the following species of this genus from Southern Utah and Nevada:

*P. pantex* Csy. Fig. II, collected at Mercury Nev.; Trout Creek, Juab Co., Ut.; and *P. haruspex* Csy. Alamo, Lincoln Co., Nev.; Hurricane, Wash. Co., Ut.; Parowan, Iron Co., Ut.; Fredonia, Ariz. *P. pantex* Csy. has a crenulate prothorax with a granulate disc; elytra finely granulate, with outer beaded strong costae inner costae almost obsolete.

In this study we have established *semilaevis* as a species of *Pelecyphorus* and illustrated its similarity to *pantex* with which it may have been mistaken. This tribe should be reviewed and new species described now that rather sizable collections have recently been made.

## References

Casey, Thomas L. 1912. Memoirs on the Coleoptera. A Revision of the American Genera of the Tenebrionid Tribe Asidini, pp. 70-212.

Horn, George H. 1870. On the Revision of the Tenebrionidae of America, North of Mexico, p. 284. Trans. Am. Phil. Soc. Vol. 14. Part II.